

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Based on research result of the effect of Brain-Based Learning on students' concept mastery and motivation in learning electric circuit, it can be concluded that Brain-Based Learning can improve students' concept mastery and motivation in learning electric circuit. There is positive correlation between students' concept mastery and motivation. The elaboration as follow:

- 1) Brain-Based Learning can improve students' concept mastery on electric circuit topic. It can be proved by the acceptance of H_1 and the result of significance is 0.003 which means that there is a significant difference of learning using Brain-Based Learning on students' concept mastery. The improvement also supported by the results of N-Gain in experiment group is 0.43 which is categorized as medium improvement and N-Gain in control group is 0.25 which is categorized as low improvement. In experimental group, there are 3.84% students got high improvement, 73.07% students got medium improvement, 11.53% students got low improvement, and 3.84% students were stable. While in control group 52.38% students got medium improvement, 38.09% students got low improvement, 4.76% students are stable, and 14.28% students are decreasing.
- 2) Brain-Based Learning is capable to improve students' motivation when is implemented electric circuit topic. The students in the experiment group have N-Gain scored better than students in control group. In experimental group, there are 3.84% students got medium improvement, 73.07% students got low improvement, 23.07% students are decreasing. While in control group 4.76% students got medium improvement, 47.61% students got low improvement, 57.14% students are decreasing. It can be concluded also that Brain-Based Learning activities improved students' motivation especially in the aspect of the performance goal,

learning environment stimulation, active learning strategies, an achievement goal, self-efficacy and science learning value.

- 3) There is correlation between students' concept mastery and motivation. In experiment group, the correlation is 0.487 which is medium correlation while in control group is 0.120 which is very low correlation. Both of the group got positive correlation
- 4) The implementation of Brain-Based Learning which included seven stages had significant effect to students' concept mastery and motivation. The difference with control group are mind-map, brain gym, music, colorful boardmarker, games, break, and rewards.

5.2 Recommendation

Based on the findings of the research that has been conducted and concluded, there are several recommendations, which are:

- 1) Brain-Based Learning can be implemented as an alternative teaching strategy for science teacher in providing activities to students to improve their concept mastery.
- 2) Further researcher can investigate the effect of Brain-Based Learning on another students' achievement or skill, students' motivation with different aspects, and another science topic.
- 3) Further research can investigate and analyse the profile of students' motivation for each students and each aspect. It can also categorize which students have high motivation, medium motivation, and low motivation.